



Air Force Research Laboratory|AFRL

Science and Technology for Tomorrow's Air and Space Force

Success Story

DR. CLAUDIA KROPAS-HUGHES SELECTED FOR AMERICAN SOCIETY OF NONDESTRUCTIVE TESTING FELLOW AWARD



Dr. Claudia Kropas-Hughes' leadership and technical contributions resulted in significant improvements in a number of existing nondestructive evaluation (NDE) techniques, and she developed new processes for nondestructive testing and pattern recognition. Her selection as American Society of Nondestructive Testing (ASNT) Fellow recognizes her individual achievement and the scientific contributions of Materials and Manufacturing Directorate researchers. It also enhances the directorate's reputation as a world leader in materials and manufacturing testing-related research and development, and highlights the directorate's efforts to support Air Force operational requirements.



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Accomplishment

ASNT selected a directorate scientist as a Fellow for her outstanding contributions to the advancement and understanding of nondestructive material testing and evaluation. Dr. Kropas-Hughes, a scientist in the Metals, Ceramics, and Nondestructive Evaluation Division, was one of only five candidates selected from the nearly 10,000-member society to receive the award for 2002. ASNT will present the award during the ASNT Annual Fall Conference in San Diego, California, in November 2002.

Background

Dr. Kropas-Hughes earned one undergraduate degree in applied mathematics from the Florida Institute of Technology, another undergraduate degree in electrical engineering from the University of Dayton, and her master's degree in electrical engineering from California State University. She was the first woman student participating in the Dayton Area Graduate Studies Institute program to receive her doctorate, which was also in electrical engineering-pattern recognition, from the Air Force Institute of Technology. Dr. Kropas-Hughes joined the directorate in 1989 to perform research and development of ultrasonic, NDE, and X-ray computed tomography (CT) techniques.

In her current position as the directorate's Nondestructive Evaluation Research Leader, Dr. Kropas-Hughes leads a team of 11 professionals in the research and development of NDE techniques and methods using ultrasonics, electromagnetic and optical methods, X-ray CT and computational methods for signal analysis, modeling, and optimization. In addition, Dr. Kropas-Hughes was part of an Electronic Prototyping Research Team, recognized as an Air Force Office of Scientific Research "Star Team." Electronic prototyping provides the means by which a researcher can conduct normally time-consuming and costly material research in a virtual environment.

Dr. Kropas-Hughes is a member of the American Society for Testing and Materials and is a senior member of the Society of Women Engineers and the Institute for Electrical and Electronic Engineers. She currently serves as the Vice Chairman of the Miami Valley Section of ASNT. The results of her nondestructive evaluation and pattern recognition work were published in 21 professional journals and publications including *Materials Evaluation*, *Pattern Analysis and Applications*, *Review of Progress in Quantitative Nondestructive Evaluation*, and *Engineering Applications for Artificial Intelligence*.

Additional information

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